



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/292,152	04/15/1999	MICHAEL A. FISCHER	00232/194001	3148

9629 7590 10/22/2002

MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

NGUYEN, DINH Q

ART UNIT	PAPER NUMBER
----------	--------------

3752

DATE MAILED: 10/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/292,152

Applicant(s)

FISCHER, MICHAEL A.

Examiner

Dinh Q Nguyen

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-104 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 21-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 2-20, 36-104 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 21-35 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Inasmuch as none of these claims require a deflector having at least two reentrant slots; i.e., structure which one of ordinary skill in the art would clearly understand from the description to be essential or critical to the operation of the claimed sprinkler. All of applicant illustrated and described include a "deflector defining at least two reentrant slots disposed in opposition about a deflector axis" (page 8, lines 22-24). Furthermore, applicant has compared his sprinkler having a reentrant-slotted deflector with those having "the conventional straight-slotted deflector" (page 24, line 19) on page 16, 24, and 25. One of ordinary skill in the art would have clearly understood from these descriptions and comparisons that the reentrant slots were not only important, but were essential to applicant's "early suppression" sprinkler.

In the instant case, applicant states throughout the specification that his deflector has at least two reentrant slots and that "With this arrangement, there is diverted a quantity of fire retardant fluid sufficient to produce the required amount of thrust in the

Art Unit: 3752

inner, downwardly-directed portion of the spray pattern at pressures lower than those produced by either straight slots or slots that taper to become slightly wider in the radially outward direction.” (page 8, line 3-9). Applicant specified that there may be “variations in the shape and dimensions of the reentrant slots” (page 26, line 3-4), but has described no deflector with reentrant slots which will function in the manner as claimed. Accordingly, the aforementioned claims are clearly rejectable as being broader than the supporting disclosure. Gentry Gallery Inc. v. Berline Corp., 45 USPQ 2d 1498, 1503 (CAFC 1998).

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 21-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitations of the instant claims are of operating parameters (i.e., NFPA, storage height, ceiling height, K factor) and not of the features that make up the apparatus.

Allowable Subject Matter

5. Claims 2-20, and 36-104 are allowed.

Response to Arguments

6. Applicant's arguments filed 22 July 2002 have been fully considered but they are not persuasive. Applicant fails to overcome the rejections of 35 U.S.C. 112, 1st and 2nd. Applicant has not provided the structural limitations required to achieve the claimed invention of an early suppression fast response (ESFR) sprinkler with a K factor of 25

and liquid pressure of at least 15 psi, the structural make up of the sprinkler required to achieve the specified K factor and pressure is of an importance feature to differentiate applicant claimed invention with other existing sprinklers such as the Ponte's sprinkler (U.S. Patent No. 5,915,479), which is also disclosed sprinkler operating at K factor of 25 (column 4, lines 8-10). Furthermore, the first paragraph on page 9 of the amendment dated 22 July 2002, applicant stated "a deflector with at least two reentrant slots is not an essential or critical feature of the claimed invention". If the structural limitation of the sprinkler is not an essential feature, then applicant has to disclose what are critical features of the claimed invention. The storage height, ceiling height, K factor, and pressure are only essential operating parameters of the claimed sprinkler system and are not critical features that make up a sprinkler. The essential features of a sprinkler for operating at a specific storage height, a specific ceiling height, a specific K factor, and a specific pressure are missing from the claimed sprinkler apparatus, especially missing of the claimed reentrant slots of U.S. Patent No. 6,059,044 in which this application claimed as a continuation-in-part.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3752

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q Nguyen whose telephone number is (703) 305-0248. The examiner can normally be reached on Monday-Friday from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7766 for regular communications and (703) 746-4591 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

dqn
October 18, 2002


MICHAEL MAR 10-19-02
PRIMARY EXAMINER